Work Orde	er ID 93719 2 10:43:04 AM			*937					Page 1		
Item ID: Revision ID:	D2282-043			Accept	*N900	<b>040</b>	100	<b>)*</b> s	Setup Start	I VI	S1*
Item Name:	Saddle Assembly								Stop	*N	S2*
Start Date:	11/22/12 <b>Sta</b>	rt Qty: 2.00	*2*		Cust Item l	D:					
Required Date: Reference:	12/07/12 Red	q'd Qty: 2.00	*2*	i e	Customer:						
Approvals:	Process Plan:	MLJ	Date: \2-1\-	나子 Tooling:	D	ate:		F	Run Start	17	R1*
	QC:		Date:	SPC (Y/N):	<b>D</b>	ate:			Stop	*N	R2*
Sequence ID/ Work Center II	_	eration cription		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision	Nbr									The commence of the state of th
D2282	Rev E										
100				0.00							
*100*	Larg	e Fab						(219 1	me	/3-	01-09
Large Fab		Memo		0.00					<del></del>		,
Large Fab		1-Weld as A/RER31	s per D2282-043 Saddle A 16L SS Filling Rod_ Dwg Rev:	m121603					1.		
110				0.00							
*110*	Sma	ll Fab	•					(D) 2	me.	13-	01-09
Small Fab		Memo		0.00	,						
Small Fab				orown pad, take all welding i ED AND BLUE PAD TO BI				i, .			
120	QC9	- Inspect visual pe	er QS1004- Fusion Welds	0.00	,.						
*120* QC		Мето		0.00	13.1.9			10x			
Quality Control											

NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	MANCE / UPL	JAIL	QA Closed:	Date	:
Work Orde	or:		***			DISPOSITION			<del> </del>	AGAINST DE			<del></del>
Part N	No.					Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite			4	Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
Root	Description of work order update					ption of work order update		Initial	Act	ion	Sign &		
Cause		Date	Step	Qty	(	or Non-conformance	Ch	Chief Eng Description			Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved	p/Tooling rator erial er												
							AUL	T CATE	GORY				
Landing Gear  Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion			General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Instruct Mainte Mislabe Misread Offset	ion Incomplete tions Incomplete/Uenance eled	Jnclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other			

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

<b>Work Orde</b> <i>November-27-12</i>				*937				Page 2			
Item ID: Revision ID: Item Name:	D2282-043 Saddle Assem	ıbly	14	Accept	*N90004	.0100	)*	Setup S	Start Stop	*NS	\$1* \$2*
Start Date: Required Date: Reference:	11/22/12 12/07/12	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item ID: Customer:						••
Approvals:		an:					]		Start Stop	*NF	२1* २2*
Sequence ID/ Work Center II 130 *120* Small Fab Small Fab	)	Operation Description  Memo 1 -Tumble		Set Up/ Run Hours 0.00	Tool ID Too	ol # Plan Code	Accept Qty	Qty	1		Insp. Stamp
150 <b>*150*</b> QC Quality Control		QC5- Inspect part comple	eteness to step on W/O	0.00 DAS 15 0.00 B-1-1	ſ		Ю	· · · · · · · · · · · · · · · · · · ·			
160 *160* Packaging Packaging		Identify as per dwg & Sto	ock Location: 🔂 🐧	0.00			10	<b>k</b>		12	Sp. "

										DQA:	Date:	
NCR: Yes	/ No				WORK ORDER NON-O	CON	VFOR	MANCE / UF		OA Clasad	Data	
Γ					T					QA Closed:	Date:	·
Work Order:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
	Part No.  NCR No.  Root Desc				, — , — ,			Skid-tube Crosstube Water Jet  Machining Small Fab Prod. Eng. Coor.  Thermoforming Finishing Rec/Store/Packaging  Large Fab Composite Supplier				Engineering Quality Other
Root				Descri	ption of work order update		nitial	A	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved	ing											
					<del></del>	AUL	T CATE	GORY				
Landing (	Gear				General							

Bend Grain Ovalized Pressure/Forced Bending Centre Not Concentric to O/S BOM/Route Hardware Over/Under tolerance Temperature/Cure Broken/Damaged Cracks Inspection Incomplete Part Incorrect Weld Crushed/Crimped. Wrong Stock Pulled Burrs Instructions Incomplete/Unclear Part Lost/Missing Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Wrong Misread Other Inspection Strip in Tube Cut Too Short Power Loss/Surge Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde November-27-12			*93719*									Page	3
Item ID: Revision ID: Item Name:	D2282-043 Saddle Asser			Accept	*N900	040°	100	* s	Setup	Start Stop	1 4	S1* S2*	
Start Date: Required Date: Reference:	11/22/12 12/07/12	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item I Customer:	D:							
Approvals:	Process P	lan:	Date:	Tooling: SPC (Y/N):		ate:		R	tun	Start Stop	*N *N	R1* R2*	
Sequence ID/ Work Center II  170 *170* QC Quality Control	D	Operation Description QC21- Final Inspection Memo	Work Order Release	Set Up/ Run Hours 0.00	Tool ID		Plan Code	Accept Qty	Re Qt	•	Reject Number	Insp. Stamp	

N 13-01-14

NCR:	Yes	1	No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:
	<del></del>

							_				QA Closed:	Date	2:	
Work Ord	er:					DISPOSITION			-	AGAINST DE	PARTMENT	/PROCESS	-	
Part I	No.					Rework Scrap Use-as-is Work Order Update			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	b Prod. Eng. Coor. Quality g Rec/Store/Packaging Other			
Root					Descri	ption of work order update	I	nitial	Ac	tion	Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	Chief Eng Description			Date	Verification	QC Inspector	
Doc/Data														
Equip/Tooling														
Operator														
Material		].												
Setup	匚													
Other														
Process			1											
Supplier			1											
Training			1											
Unapproved				l			<u> </u>							
					·····		AUL	T CATE	GORY					
Landi	_	1			_	General				_	7	_	<b>¬</b>	
	<u> </u>	Bending				Bend	-	Grain		<u> </u>	Ovalized	_	Pressure/Forced	
		Centre No	ot Concei	ntric to	<sup>O/S</sup>	BOM/Route	-	Hardwa		-	Over/Under	<del></del>	Temperature/Cure	
	$\vdash$	Cracks				Broken/Damaged	_	•	ion Incomplete		Part Incorre	<b>⊢</b>	Weld	
	$\vdash$	Crushed/	Crimped.		<u> </u>	Burrs	-		ions Incomplete/	Unclear	Part Lost/M	issing	Wrong Stock Pulled	
	Cuffs Contamination			$\vdash$	Mainte		ļ. <u>.</u> .	Part Moved						
.	$\vdash$	Heat Trea		T., b -	<u> </u>	Countersink	$\vdash$	Mislabe		<u> </u> -	Positioned V			
1		Inspection		rupe	<u> </u> -	Cut Too Short	$\vdash$	Misread	1	L.	Power Loss/	Surge	Other	
1	-	Ripples in		الماسية	_	Drill Holes	Offset Out of Calibration							
	Torque Waves in Extrusion Drawing		- Č	$\vdash$										
	Turning Sequence Finish		4	$\vdash$		Sequence								
	1	Wave/Twist in Tube Folio			1	Outside	Dimensions							

Picklist Print November-27-12 10	):43:03 AM												Page 1
Work Order ID: Parent Item: Parent Item Name: Comments:	93719 D2282-043 Saddle Assembly IPP Rev:A	Removed from 9 Dig	oit (	05-12-02 JLM					art Date: 11/22/ tart Qty: 2.00	12	Required E		7/12
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2281 Dack Saddle	100 P	Manufactured	No			100	Each	57.0000	(20)	プラッシュ	<u>e</u>	13-0	1-09
				Location		Loc Qty	<u>Lo</u>	oc Code					
B_84-3,	71	- 701		GA		10							
W-87-),	41 1			8432	1	10							
				WA	_	30				<u>.</u>			
				6753 9209		0 30							
				WA020		17			<del></del>				
				6753	9	17							
<b>D2282-7</b> <i>Tube</i>		Manufactured	No			100	Each	37.0000	2 (x 20	3 2/	re	13-0	01-09
age . ↓ W				Location		Loc Qty	<u>La</u>	oc Code					
				WA		37							
B-9760	9 x 2	2_1		8001		5							
		=		9160	)9	2			····				

B-92094 x 18)

									DQA:	Date:	
NCR: Ye	s / No				WORK ORDER NON-C	ONFOR	MANCE / UP		QA Closed:	Date:	
Work Order:	•	-			DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No	)				Rework Skid-tube Crosstube  Scrap Machining Small Fab  The graph of the strength of the streng			ł	Water Jet d. Eng. Coor.	Engineering Quality Quality	
NCR No	)				Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite				Rec/Stol	e/Packaging Supplier	Other
Root				Descri	ption of work order update	Initial	itial Action		Sign &		
Cause	Date	Step	Qty	(	or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other	7										
Process	7										

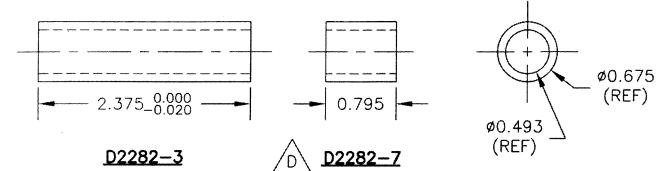
## **FAULT CATEGORY Landing Gear** General Bend Bending Grain Ovalized Pressure/Forced Centre Not Concentric to O/S BOM/Route Over/Under tolerance Temperature/Cure Hardware Cracks Broken/Damaged Inspection Incomplete Part Incorrect Weld Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Cuffs Contamination Part Moved Maintenance Positioned Wrong Heat Treat Mislabeled Countersink Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Other Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube Outside Dimensions

Supplier Training Unapproved



DESIG	N BW	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	)
CHECK	(ED)	APPROVED	DRAWING NO. D2282 SHEE	REV. E
DATE	*1	I leav	TITLE	SCALE
05.0	6.07		HANDLE TUBES	1:1
Α		94.10.14	NEW ISSUE	
В		95.03.23	RE-DESIGN	
(		07.40.00	CODDECTED MUNICIPAL COLLEME	

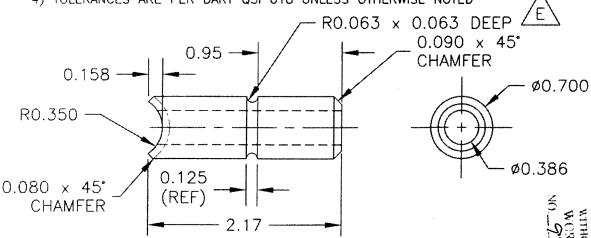
Α	94.10.14	NEW ISSUE
В	95.03.23	RE-DESIGN
C	97.10.20	CORRECTED NUMBERING SCHEME
D	05.03.16	REDESIGN D2282-5; 0.795 WAS 0.750
Ε	05.06.07	D2282-5 304 SS WAS 303 SS; R0.063 x 0.063 WAS R0.080 x 0.030



D2282-3/-7 TUBE:

- 1) MATERIAL: T304/T316 3/8 SCHEDULE 40 (REF. DART SPEC. M304TR0.675W.091)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES

4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D2282-5

D2282-5 STEM:

- 1) MATERIAL: AISI 304 STAINLESS STEEL (REF. DART SPEC. M304R0.750)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

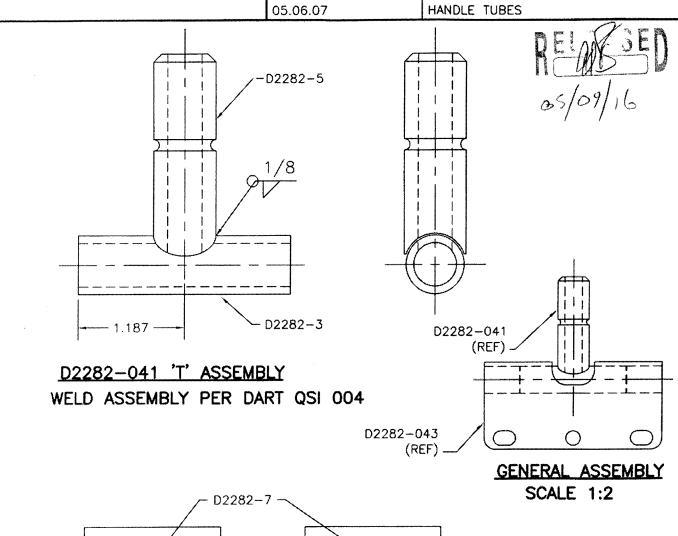
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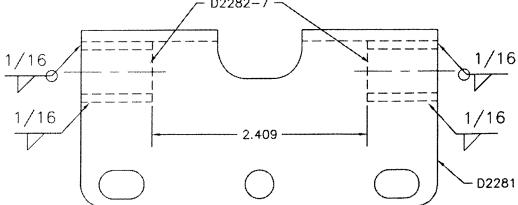
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DESIGN DRAWN BY		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. E
l u'	11116	D2282	SHEET 2 OF 2
DATE	1 23/2/	TITLE	SCALE
05.06.07		HANDLE TUBES	1:1





D2282-043 SADDLE ASSEMBLY WELD ASSEMBLY PER DART QSI 004

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